# AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act as amended (33 U.S.C. §§1251 et seq.; the "CWA"), and the Massachusetts Clean Waters Act, as amended (M.G.L. Chap. 21, §§26-53),

## City of Easthampton Board of Public Works

is authorized to discharge from a facility located at

# Easthampton Wastewater Treatment Facility Gosselin Drive, Easthampton, MA 01027

to receiving waters named

## **Connecticut River and Manhan River (Connecticut River Basin)**

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit will become effective on December 1, 2007.

This permit and the authorization to discharge shall expire at midnight on November 30, 2012.

This permit supersedes the permit issued on September 29, 1995, effective on October 29, 1995 and expired on October 29, 2000.

This permit consists of 15 pages in Part I, including effluent limitations, monitoring requirements; Part II, including General Conditions and Definitions; and Attachments A (Toxicity Testing Protocol), B and C (Industrial Pretreatment) and D (Sludge Guidance).

Signed this 29th day of September, 2007

#### /S/ SIGNATURE ON FILE

Director Office of Ecosystem Protection Environmental Protection Agency Boston, MA Director
Division of Watershed Management
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

# **PART I**

A.1. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge from outfall serial number **001**, treated effluent to the Connecticut River. Such discharges shall be limited and monitored as specified below.

EFFLUENT CHARACTERISTIC

EFFLUENT LIMITS

MONITORING REQUIREMENTS

PARAMETER	AVERAGE MONTHLY	AVERAGE WEEKLY	AVERAGE MONTHLY	AVERAGE WEEKLY	MAXIMUM DAILY	MEASUREMENT FREQUENCY	SAMPLE <sup>4</sup> TYPE
FLOW: combined outfall 001and 002	*******	*******	3.8 MGD <sup>2</sup>	*******	******	CONTINUOUS	RECORDER
FLOW: combined outfall 001and 002	******	******	Report MGD	******	Report MGD	CONTINUOUS	RECORDER
FLOW: outfall 001 <sup>3</sup>	******	******	Report MGD	******	Report MGD	CONTINUOUS	RECORDER
BOD <sub>5</sub> <sup>5</sup>	951 lbs/day <sup>5a</sup>	1426 lbs/day <sup>5a</sup>	30 mg/l	45 mg/l	Report mg/l <sup>1</sup>	2/WEEK	24-HOUR COMPOSITE <sup>6</sup>
TSS <sup>5</sup>	951 lbs/day <sup>5a</sup>	1426 lbs/day <sup>5a</sup>	30 mg/l	45 mg/l	Report mg/l <sup>1</sup>	2/WEEK	24-HOUR COMPOSITE <sup>6</sup>
pH RANGE <sup>1</sup>	6.0 - 8	6.0 - 8.3 SU SEE PERMIT PAGE 6 OF 15, PARAGRAPH I.A.3.b.					GRAB
FECAL COLIFORM <sup>1,7</sup> (seasonal April 1 - Nov 30)	*******	******	200 cfu/100 ml	******	400 cfu/100 ml	2/WEEK	GRAB
Escherichia coli ( <i>E. coli</i> ) <sup>1,7</sup> (seasonal April 1 - Nov 30)	*******	******	126 cfu/100 ml	******	409 cfu/100 ml	2/WEEK	GRAB
TOTAL CHLORINE RESIDUAL <sup>1,7</sup> (seasonal April 1 - Nov 30): outfall 001	*******	******	1.0 mg/l	******	1.0 mg/l	1/DAY	GRAB
TOTAL NITROGEN <sup>8</sup>	*******	*******	********	*******	Report mg/l Report lbs/day	1/MONTH 1/MONTH	24-HOUR COMPOSITE <sup>6</sup> 24-HOUR COMPOSITE <sup>6</sup>
TOTAL KJELDAHL NITROGEN	*******	******	*******	******	Report mg/l	1/MONTH	24-HOUR COMPOSITE <sup>6</sup>
TOTAL AMMONIA NITROGEN	*******	*******	*******	******	Report mg/l	1/MONTH	24-HOUR COMPOSITE <sup>6</sup>
NITRITE & NITRATE NITROGEN	*******	*******	*******	******	Report mg/l	1/MONTH	24-HOUR COMPOSITE <sup>6</sup>
TOTAL PHOSPHORUS	*******	******	Report mg/l	******	Report mg/l	1/MONTH	24-HOUR COMPOSITE <sup>6</sup>

WHOLE EFFLUENT TOXICITY	Acute	$LC_{50} \geq 50\%$	2/YEAR	24-HOUR COMPOSITE <sup>6</sup>
SEE FOOTNOTES 9, 10, 11 and 12				

A.2. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge from outfall serial number **002**, treated effluent to the Manhan River. Such discharges shall be limited and monitored as specified below.

EFFLUENT CHARACTERISTIC

EFFLUENT LIMITS

MONITORING REQUIREMENTS

			_			<u> </u>	
PARAMETER	AVERAGE MONTHLY	AVERAGE WEEKLY	AVERAGE MONTHLY	AVERAGE WEEKLY	MAXIMUM <u>DAILY</u>	MEASUREMENT FREQUENCY	SAMPLE <sup>4</sup> TYPE
FLOW: outfall 002 <sup>3</sup>	******	*******	Report MGD	******	Report MGD	CONTINUOUS	RECORDER
BOD <sub>5</sub> <sup>5</sup>	*******	*******	30 mg/l	45 mg/l	Report mg/l <sup>1</sup>	2/WEEK	24-HOUR COMPOSITE <sup>6</sup>
TSS <sup>5</sup>	******	*******	30 mg/l	45 mg/l	Report mg/l <sup>1</sup>	2/WEEK	24-HOUR COMPOSITE <sup>6</sup>
pH RANGE <sup>1</sup>	6.5 - 8	8.3 SU SEE PERM	IIT PAGE 6 OF 1:	1/DAY	GRAB		
FECAL COLIFORM <sup>1,7</sup> (seasonal April 1 -Nov 30)	*******	*******	200 cfu/100 ml	******	400 cfu/100 ml	2/WEEK	GRAB
Escherichia coli ( <i>E. Coli</i> ) <sup>1,7</sup> (seasonal April 1 -Nov30)	******	*******	126 cfu/100 ml	******	409 cfu/100 ml	2/WEEK	GRAB
TOTAL CHLORINE RESIDUAL <sup>1,7</sup> (seasonal April 1-Nov 30)	******	*******	0.05 mg/l	******	0.05 mg/l	1/DAY	GRAB
TOTAL NITROGEN <sup>8</sup>	******	********	********	*******	Report mg/l Report lbs/day	1/MONTH 1/MONTH	24-HOUR COMPOSITE <sup>6</sup> 24-HOUR COMPOSITE <sup>6</sup>
TOTAL KJELDAHL NITROGEN	*******	*******	******	******	Report mg/l	1/MONTH	24-HOUR COMPOSITE <sup>6</sup>
TOTAL AMMONIA NITROGEN	******	******	******	******	Report mg/l	1/MONTH	24-HOUR COMPOSITE <sup>6</sup>
NITRITE & NITRATE NITROGEN	******	******	******	******	Report mg/l	1/MONTH	24-HOUR COMPOSITE <sup>6</sup>
TOTAL PHOSPHORUS	*******	*******	Report mg/l	******	Report mg/l	1/WEEK	24-HOUR COMPOSITE <sup>6</sup>

NPDES Permit No. MA 0101478

Page 4 of 16

WHOLE EFFLUENT TOXICITY	Acute	$LC_{50} \geq 100\%$	2/YEAR	24-HOUR COMPOSITE <sup>6</sup>
SEE FOOTNOTES 9, 10, 11 and 12	Chronic	C-NOEC = report		

#### Footnotes:

- 1) Required for State Certification.
- This is an annual average limit, which shall be based on the flow measurements at the influent flow meter and shall be reported as a rolling annual average. The first value will be calculated using the monthly average flow for the first full month ending after the effective date of the permit and the eleven previous monthly average flows. Each subsequent month's DMR report will report the annual average flow that is calculated from that month and the previous 11 months. The individual monthly average and the maximum daily flows measured at the influent flow meter during the month shall also be reported. The combined flow of Outfall 1 and Outfall 2 shall be reported on a separate DMR.
- Outfall 001: Report monthly average and maximum daily flow on the discharge monitoring report (DMR). Attach a report to each monthly DMR which includes the total daily flow, maximum daily flow rate, and minimum daily flow rates for each day. See Part I.F.2. for the schedule for installing this meter.
  - Outfall 002: Report monthly average flow (total monthly discharge divided by days of discharge) and maximum daily flow on discharge monitoring report (DMR). Attach a report to each monthly DMR which includes the duration of discharge, total daily discharge and maximum flow rate for each day that the discharge is active. See Part I.F.2. for the schedule for upgrading this meter.
- All required effluent samples shall be collected prior to chlorination except for the total chlorine residual and *E. coli* and fecal coliform samples, which shall be taken after disinfection. Any change in sampling location must be reviewed and approved in writing by EPA and MassDEP. A routine sampling program shall be developed in which samples are taken at the same location, time and days of each month. Any deviations from the routine sampling program shall be documented in correspondence appended to the applicable discharge monitoring report that is submitted to EPA and MassDEP. All samples shall be tested using analytical methods found in 40 CFR 136, or alternative methods approved by EPA in accordance with procedures in 40 CFR 136. All samples shall be 24-hour flow based composites unless specified as a grab sample in 40 CFR 136. The permittee shall submit the results to EPA of any testing done in addition to that required herein if it is conducted in accordance with EPA approved methods, consistent with the provisions of 40 CFR 122.41(1)(4)(ii).
- 5) Sampling required for influent and effluent.
- 5a) The mass limits for BOD and TSS are the total allowable mass discharge from both Outfall # 001 and #002. The monthly average mass discharge shall be calculated using the monthly average flow from the influent flow meter and the monthly average concentration. The daily discharge shall be calculated for each day a sample is taken using the concentration from the sample and the total daily flow on that day as measured at the influent flow meter. The day with the greatest mass discharge shall be reported as

- the maximum daily discharge. The combined BOD and TSS mass discharges shall be reported on a separate DMR.
- A 24-hour composite will consist of at least 24 flow proportional grab samples taken during one consecutive 24 hour period (e.g., 0700 Monday to 0700 Tuesday).
- The average monthly limits for fecal coliform and *E.coli* are expressed as geometric means. The fecal coliform limits shall expire one year after the effective date of this permit. The *E. coli* limits shall become effective one year after the effective date of this permit. For the first year, the *E. coli* limits shall be report only. A total residual chlorine sample shall be taken at the same time as *E. coli* and fecal coliform samples.
- 8) See Part I.F.3. for requirements to evaluate and implement optimization of nitrogen removal.
- 9) The permittee shall conduct acute toxicity tests for Outfall 001 two times per year. The permittee shall test the daphnid, *Ceriodaphnia dubia*. Toxicity test samples shall be collected during the second week of June and September. **Results are to be submitted by the 30**th day of the month after the sample, i.e. July and October. See Permit Attachment A Toxicity Test Procedure and Protocol.
  - The permittee shall conduct acute and chronic toxicity tests for Outfall 002 two times per year. The permittee shall test the daphnid, *Ceriodaphnia dubia*. Toxicity test samples shall be collected March and December. **Results are to be submitted by the 30<sup>th</sup> day of the month after the sample, i.e. April and January.** See Permit Attachment A Toxicity Test Procedure and Protocol.
- 10) The  $LC_{50}$  is the concentration of effluent which causes mortality to 50% of the test organisms. Therefore, a 50% limit means that a sample of 50% effluent shall cause no more than a 50% mortality rate. A 100% limit means that a sample of 100% effluent shall cause no more than a 50% mortality rate.
- Chronic No Observed Effects Concentration (C-NOEC) is defined as the highest concentration of toxicant or effluent to which organisms are exposed in a life-cycle or partial life-cycle test which causes no adverse effect on growth, survival, and reproduction as determined from hypothesis testing where the test results exhibit a linear dose-response relationship. However, where the test results do not exhibit a linear dose-response relationship, the permittee must report the lowest concentration at which there is no observable effect.
- 12) If toxicity test(s) using receiving water as diluent show the receiving water to be toxic or unreliable, the permittee shall follow procedures outlined in Attachment A, Section IV., DILUTION WATER in order to obtain permission to use an alternate dilution water. In lieu of individual approvals for alternate dilution water required in Attachment A, EPA-New England has developed a Self-Implementing Alternative Dilution Water Guidance document (called "Guidance Document") which may be used to obtain automatic

approval of an alternate dilution water, including the appropriate species for use with that water. If this Guidance document is revoked, the permittee shall revert to obtaining approval as outlined in Attachment A. The "Guidance Document" has been sent to all permittees with their annual set of DMRs and is not intended as a direct attachment to this permit. Any modification or revocation to this "Guidance Document" will be transmitted to the permittees as part of the annual DMR instruction package. However, at any time, the permittee may choose to contact EPA-New England directly using the approach outlined in Attachment A.

If alternate dilution water is used according to EPA protocols, a site water control, including required chemical analyses, is also required. Information concerning this requirement is in section G (#20) of the report "NPDES Permit Program Instructions for the Discharge Monitoring Report Forms (DMRs) Report Year 2007 which can be found at the EPA web site: www.epa.gov/region01/enforcementandassistance/dmr2007.pdf

#### PART I.A.3.

- a. The discharge shall not cause a violation of the water quality standards of the receiving waters.
- b The pH of the effluent from Outfall 001 shall not be less than 6.0 S.U., nor greater than 8.3 S.U. at any time and the pH of Outfall 002 shall not be less than 6.5 S.U. nor greater than 8.3 S.U.
- c The discharge shall not cause objectionable discoloration of the receiving water.
- d. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time.
- e. The permittee's treatment facility shall maintain a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand. The percent removal shall be based on monthly average values.
- f. If the average annual flow in any calendar year exceeds 80 percent of the facility's design flow, **the permittee shall submit a report to MassDEP by March 31** of the following calendar year describing its plans for further flow increases and describing how it will maintain compliance with the flow limit and all other effluent limitations and conditions.
- g. This permit may be modified or revoked and reissued based upon results of ESA section 7 consultation with the National Marine Fisheries Service.

## Part I.A.4. All POTWs must provide adequate notice to the Director of the following:

a. Any new introduction of pollutants into that POTW from an indirect discharger in a primary industry category discharging process water; and/or any substantial

change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

- b. For the purposes of this paragraph, adequate notice shall include information on:
  - 1. The quantity and quality of effluent introduced into the POTW; and
  - 2. Any anticipated impact of the change in the quantity or quality of effluent to be discharged from the POTW.

## Part I.A.5. *Prohibitions Concerning Interference and Pass Through:*

Pollutants introduced into POTWs by a non-domestic source shall not pass through the POTW or interfere with the operation or performance of the works.

#### Part I.A.6. *Toxics Control*:

- a. The permittee shall not discharge any pollutant or combinations of pollutants in toxic amounts.
- b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

## Part I.A.7. Numerical Effluent Limitations for Toxicants:

EPA or MassDEP may use the results of toxicity tests and chemical analyses conducted pursuant to this permit, as well as national water quality criteria developed pursuant to Section 304(a)(1) of the Clean Water Act (CWA), state water quality criteria, and any other appropriate information or data, to develop numerical effluent limitations for any pollutants, including but not limited to those pollutants listed in Appendix D of 40 CFR Part 122.

#### B. LOCAL LIMITS AND INDUSTRIAL PRETREATMENT PROGRAM

## 1. Limitations for Industrial Users

The permittee shall develop and enforce specific effluent limits (local limits) for Industrial User(s), and all other users, as appropriate, which together with appropriate changes in the POTW Treatment Plant's Facilities or operation, are necessary to ensure continued compliance with the POTW's NPDES permit or sludge use or disposal practices. Specific local limits shall not be developed and enforced without individual notice to persons or

groups who have requested such notice and an opportunity to respond. Within 120 days of the effective date of this permit, the permittee shall prepare and submit a written technical evaluation to the EPA analyzing whether or not there is a need to revise the local limits.

As part of this evaluation, the permittee shall assess how the POTW performs with respect to influent and effluent of pollutants, water quality concerns, sludge quality, sludge processing concerns/inhibition, biomonitoring results, activated sludge inhibition, worker health and safety and collection system concerns.

In preparing this evaluation, the permittee shall complete and submit the attached form (Attachment B) with the technical evaluation to assist in determining whether existing local limits need to be revised. Justifications and conclusions should be based on actual plant data if available and should be included in the report.

Should the evaluation reveal the need to revise local limits, the permittee shall complete the revisions within 120 days of notification by EPA and submit the revisions to EPA for approval. The Permittee shall carry out the local limits revisions in accordance with EPA manual, Local Limit Development Guidance [EPA-833-R-04-022A, July 2004].

## 2. Industrial Pretreatment Program

The permittee shall implement the Industrial Pretreatment Program in accordance with the legal authorities, policies, procedures, and financial provisions described in the permittee's approved Pretreatment Program, and the General Pretreatment Regulations, 40 CFR 403. At a minimum, the permittee must perform the following duties to properly implement the Industrial Pretreatment Program (IPP):

- a. Carry out inspection, surveillance, and monitoring procedures which will determine, independent of information supplied by the industrial user, whether the industrial user is in compliance with the Pretreatment Standards. At a minimum, all significant industrial users shall be sampled and inspected at the frequency established in the approved IPP but in no case less than once per year and maintain adequate records.
- b. Issue or renew all necessary industrial user control mechanisms within 90 days of their expiration date or within 180 days after the industry has been determined to be a significant industrial user.
- c. Obtain appropriate remedies for noncompliance by any industrial user with any pretreatment standard and/or requirement.
- d. Maintain an adequate revenue structure for continued implementation of the Pretreatment Program.

- 3. The permittee shall provide the EPA and MassDEP with an annual report describing the permittee's pretreatment program activities in accordance with 40 CFR 403.12(i). The annual report shall be consistent with the format described in Attachment C of this permit and shall be submitted no later than March 1 of each year.
- 4. The permittee must obtain approval from EPA prior to making any significant changes to the industrial pretreatment program in accordance with 40 CFR 403.18(c).
- 5. The permittee must assure that applicable National Categorical Pretreatment Standards are met by all categorical industrial users of the POTW. These standards are published in the Federal Regulations at 40 CFR 405 et. seq.
- 6. The permittee must modify its pretreatment program, if necessary, to conform to all changes in the Federal Regulations that pertain to the implementation and enforcement of the industrial pretreatment program. The permittee must provide EPA, in writing, within 180 days of this permit's effective date, proposed changes, if applicable, to the permittee's pretreatment program deemed necessary to assure conformity with current Federal Regulations. At a minimum, the permittee must address in its written submission the following areas: (1) proposed changes to the enforcement response plan, (2) revised sewer use ordinances and (3) slug control evaluations. The permittee will implement these proposed changes pending EPA Region I's approval under 40 CFR 403.18. This submission is separate and distinct from any local limits analysis submission described in Part I.B.1.
- 7. On October 14, 2005 EPA published in the Federal Register final changes to the General Pretreatment Regulations. The final "Pretreatment Streamlining Rule" is designed to reduce the burden to industrial users and provide regulatory flexibility in technical and administrative requirements of industrial users and POTWs. Within 90 days of the effective date of this permit, the permittee must submit to EPA all required modifications of the Streamlining Rule in order to be consistent with the provisions of the newly promulgated Rule. To the extent that the POTW legal authority is not consistent with the required changes, they must be revised and submitted to EPA for review.

#### C. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from the outfalls listed in Parts I.A.1 and I.A.2. Discharge of wastewater from any other point source is not authorized by this permit and shall be reported in accordance with Section D.1.e(1) of the General Requirements of this permit (**Twenty-four hour reporting**). [Note: SSO Reporting Form (which includes MassDEP Regional Office telephone numbers) for submittal of written report to MassDEP is available on-line at: http://www.mass.gov/dep/water/approvals/surffms.htm#sso.]

#### D. OPERATION AND MAINTENANCE OF THE SEWER SYSTEM

Operation and maintenance of the sewer system shall be in compliance with the General Requirements of Part II and the following terms and conditions:

## 1. Maintenance Staff

The permittee shall provide adequate staff to carry out the operations, maintenance, repair and testing functions required to ensure compliance with the terms and conditions of this permit.

## 2. Preventative Maintenance Program

The permittee shall maintain an ongoing preventative maintenance program to prevent overflows and bypasses caused by malfunctions or failures of the sewer system infrastructure. The program shall include an inspection program designed to identify all potential and actual unauthorized discharges.

## 3. Infiltration/Inflow Control Plan

The permittee shall develop and implement a plan to control infiltration and inflow (I/I) to the separate sewer system. The **plan shall be submitted to EPA and MassDEP within twelve months of the effective date of this permit** (see page 1 of this permit for the effective date) and shall describe the permittee's program for preventing infiltration/inflow related effluent limit violations, and all unauthorized discharges of wastewater, including overflows and by-passes due to excessive infiltration/inflow.

#### The plan shall include:

- An ongoing program to identify and remove sources of infiltration and inflow. The program shall include the necessary funding level and the source(s) of funding.
- An inflow identification and control program that focuses on the disconnection and redirection of illegal sump pumps and roof down spouts. Priority should be given to removal of public and private inflow sources that are upstream from, and potentially contribute to, known areas of sewer system backups and/or overflows.
- Identification and prioritization of areas that will provide increased aquifer recharge as the result of reduction/elimination of infiltration and inflow to the system.
- An educational public outreach program for all aspects of I/I control, particularly private inflow.

• The permittee shall require, through appropriate agreements, that all member communities develop and implement infiltration and inflow control plans sufficient to ensure that high flows do not cause or contribute to a violation of the permittee's effluent limitations, or cause overflows from the permittee's collection system.

## Reporting Requirements:

A summary report of all actions taken to minimize I/I during the previous calendar year shall be submitted to EPA and the MassDEP annually, by the anniversary date of the effective date of this permit. The summary report shall, at a minimum, include:

- A map and a description of inspection and maintenance activities conducted and corrective actions taken during the previous year.
- Expenditures for any infiltration/inflow related maintenance activities and corrective actions taken during the previous year.
- A map with areas identified for I/I-related investigation/action in the coming year.
- A calculation of the annual average I/I and the maximum month I/I for the reporting year.
- A report of any infiltration/inflow related corrective actions taken as a result of unauthorized discharges reported pursuant to 314 CMR 3.19(20) and reported pursuant to the Unauthorized Discharges section of this permit.

#### 4. Alternative Power Source

In order to maintain compliance with the terms and conditions of this permit, the permittee shall continue to provide an alternative power source with which to sufficiently operate its treatment works (as defined at 40 CFR §122.2).

#### E. SLUDGE CONDITIONS

- 1. The permittee shall comply with all existing federal and state laws and regulations that apply to sewage sludge use and disposal practices and with the CWA Section 405(d) technical standards.
- 2. The permittee shall comply the more stringent of either state (310 CMR 32.00) or federal regulations (40 CFR part 503).
- 3. The technical standards (part 503 regulations) apply to facilities which perform one or more of the following use or disposal practices:

- a. Land application the use of sewage sludge to condition or fertilize the soil;
- b. Surface disposal the placement of sewage sludge in a sludge-only landfill; or
- c. Sewage sludge incineration in a sludge-only incinerator.
- 4. The 40 CFR part 503 conditions do not apply to facilities which place sludge within a municipal solid waste landfill. These conditions also do not apply to facilities which do not dispose of sewage sludge during the life of the permit but rather treat the sludge (e.g., lagoons reed beds), or are otherwise excluded under 40 CFR 503.6.
- 5. The permittee shall use and comply with the attached guidance document to determine appropriate conditions. Appropriate conditions contain the following elements:
  - a. General requirements
  - b. Pollutant limitations
  - c. Operational standards (pathogen reduction requirement and vector attraction reduction requirements)
  - d. Management practices
  - e. Record keeping
  - f. Monitoring
  - g. Reporting

Depending upon the quality of material produced by a facility, all conditions may not apply to the facility.

6. The permittee shall monitor the pollutant concentrations, pathogen reduction and vector attraction reduction at the following frequency. This frequency is based upon the volume of sewage sludge generated at the facility in dry metric tons per year:

Sludge Volume (dry metric tons/year)

less than 290

290 to less than 1,500

1/quarter

1,500 to less than 15,000

5/year

1/month

- 7. The permittee shall sample the sewage sludge using the procedures detailed in 40 CFR 503.8.
- 8. The permittee shall submit an annual report containing the information specified in the guidance (Attachment D). **Reports are due annually by February 19**<sup>th</sup>. Reports shall be submitted to the addresses contained in the reporting section of the permit. Sludge monitoring is not required by the permittee when the permittee is not responsible for the ultimate sludge disposal. The permittee must be assured that any third party contractor is in compliance with appropriate regulatory requirements. In such a case, the permittee is

required only to submit an annual report by February 19<sup>th</sup> containing the following information:

- Name and address of contractor responsible for sludge disposal
- Quantity of sludge in dry metric tons removed from the facility by the sludge contractor

#### F. SPECIAL CONDITIONS

- 1. The permittee shall conduct an evaluation of the hydraulic capacity of the main effluent discharge pipe (Outfall 001). The evaluation shall consist of an evaluation of short term improvements to maximize the use of Outfall 001, and an evaluation of long term improvements to eliminate the high flow discharge to the Manhan River through Outfall 002. The short term assessment shall evaluate operational and structural modifications to the diversion control structure. The long term evaluation shall include an evaluation of the engineering elements, associated costs and the environmental benefits of eliminating the discharge to the Manhan River. If elimination of the discharge from Outfall 002 is deemed infeasible or cost prohibitive, the assessment should evaluate the impact of the discharge to the Manhan River to ensure that water quality standards are maintained. The assessment report shall be submitted to EPA and MassDEP within 24 months of the effective date of this permit.
- 2. The permittee shall install a meter to measure the effluent flow from Outfall 001. In addition, the permittee shall re-calibrate or install a new meter to properly measure the effluent flow from Outfall 002. Both meters shall be installed within 12 months of the effective date of the permit.
- 3. Within **one year of the effective date of the permit**, the permittee shall complete an evaluation of alternative methods of operating the existing wastewater treatment facility to optimize the removal of nitrogen, and submit a report to EPA and MassDEP documenting this evaluation and presenting a description of recommended operational changes. The methods to be evaluated include, but are not limited to, operational changes designed to enhance nitrification (seasonal and year round), incorporation of anoxic zones, septage receiving policies and procedures, and side stream management. The permittee shall implement the recommended operational changes in order to maintain the existing mass discharge loading of total nitrogen. Existing mass loadings will be based on the levels monitored by the facility over the first year of the permit term.

The permittee shall also submit an annual report to EPA and MassDEP, **by February 1 each year**, that summarizes activities related to optimizing nitrogen removal efficiencies, documents the annual nitrogen discharge load from the facility, and tracks trends relative to the previous year.

## G. MONITORING AND REPORTING

## 1. Reporting

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report Forms(s) postmarked no later than the 15<sup>th</sup> day of the month following the effective date of the permit.

Signed and dated originals of these, and all other reports required herein, shall be submitted to the Director and the State at the following addresses:

Environmental Protection Agency Water Technical Unit (SEW) P.O. Box 8127 Boston, MA 02114

The State agency is:

Massachusetts Department of Environmental Protection Western Regional Office-Bureau of Resource Protection 436 Dwight Street Springfield, MA 01103

Signed and dated Discharge Monitoring Report forms, toxicity test reports, and all other reports required herein, shall also be submitted to the State at the following address:

Massachusetts Department of Environmental Protection

Division of Watershed Management-Surface Water Discharge Permit Program
627 Main Street, 2<sup>nd</sup> Floor
Worcester, MA 01608

Any reports required to be submitted in Section B, "Local Limits and Industrial Pretreatment Program" shall be sent to:

EPA New England Attn: Justin Pimpare One Congress Street Suite 1100 - CMU Boston, MA 02114

#### H. STATE PERMIT CONDITIONS

- 1. This discharge permit is issued jointly by the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) under federal and state law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the MassDEP pursuant to M.G. L., Chap. 21, §43.
- 2. Each agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension, or revocation of this permit shall be effective only with respect to the agency taking such action, and shall not affect the validity or status of this permit as issued by the other agency, unless and until each agency has concurred in writing with such modification, suspension, or revocation. In the event any portion of this permit is declared invalid, illegal, or otherwise issued in violation of state law such permit shall remain in full force and effect under federal law as an NPDES permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal, or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a permit issued by the Commonwealth of Massachusetts.